

ABSTRACT OF THE DISCLOSURE

A system for dividing flow of gas into a plurality of secondary flow paths at predetermined ratios comprises pressure sensing type mass flow controllers in each secondary flow path and a common controller connected to the mass flow controllers. One of the secondary flow paths is fully opened, and the ratio of the flow rate in each of the other secondary flow paths relative to the flow rate in the fully opened path is set at a value of 1 or less. The common controller provides a set signal for each of the other mass flow controllers by multiplying a measured flow rate in the fully opened secondary flow path by a predetermined ratio. A wider range of divided flow ratios can be achieved and the response and flow accuracy are superior, especially when flow ratios are changed.